Abstract of the Disclosure

A polishing device having a table connected to a traction drive type reduction gear. The reduction gear includes an externally contacting shaft formed in a ring-shaped hollow cylinder and arranged at the center; a plurality of intermediate shafts which are equidistantly disposed at the circumference of the externally contacting shaft, at least one of which is an input shaft; and an internally contacting cylinder with which the intermediate shafts internally contact, and under free conditions, the externally contacting shaft formed in a hollow cylinder has a diameter which is a little bit larger than a diameter of an imaginary circle which externally contacts with a plurality of intermediate shafts whereby pressing load is created by means of deformation of the hollow cylinder.

